Welcome to the

Chattahoochee Valley / Ft Benning

AUSA Industry Day 2016.

Welcome
Administrative Remarks

- **Please Review Your Welcome Package**
  - Morning Panel Discussions
  - Box Lunch – North Hall
  - Afternoon Panel Discussions – All on 2nd Floor
  - Post Conference Reception – Foundry Room
  - Industry Day CD
- **Administrative Announcements**
  - Exits
  - Rest Rooms
- **Please Turn Cell Phones to Silent!!**
- **Microphones are located…**

13 April 16 / Columbus Trade Center

0730-0900	Badge Pick Up / On Site Registration	
0900-0910	Mr. Carlisle CV / FB President	Opening Remarks
0910-0920	Mr. Carlisle / COL Harvey	MCoE/Industry Partnership
0920-0950	Mr. Carlisle / BG Wesley	CG, MCoE
0950-1010	Break	
1010-1035	Mr. Carlisle / Mr. Sando	Capabilities Development
1035-1050	Mr. Carlisle / BG Jones	Infantry Commandant
1050-1135	Mr. Carlisle / Panel Discussion	MRD, SD, DOTD, BCT MC
1135-1150	Mr. Carlisle / Mr. Davis	Maneuver Battle Lab
1150-1200	Mr. Carlisle / Mr. Pat Berger	CAFIX
1200-1300	Lunch	
1300-1445	Mr. Carlisle / Mr. Sando	Breakout Session 1
	Sycamore Room: Soldier – Soldier Systems, Robots/Energy, Lethality, and Sensors/Night Vision	
	Room 205: Mounted - Mobility, Protection and Lethality	
	Room 209: Training and Human Dimension	
	Room 211: Mission Command	
	Room 212: MCoE IDIQ MATOC Acquisition Strategy (1300-1400 only)	
1445-1515	Break	
1515-1700	Mr. Carlisle/Mr. Sando	Breakout Session 2
	(repeat schedule of Breakout Session 1)	
1700-UTC	AUSA Post Conference Reception	Mr. Tom Carlisle

AUSA CV/FB Objectives

A non-profit professional, educational association dedicated to being the “Voice of the Army” providing “Support for the Soldier”

National organization comprised of local chapters:
- Think Nationally -- Act Locally!

AUSA represents every American Soldier by:

Being the voice for all components of America's Army
Fostering public support of the Army's role in national security
Providing professional education and information programs

CV/FB Board of Directors

Mr. Thomas Carlisle
Chapter President

Mr. Dan Barnett
Treasurer

Mr. Rocky Kmiecik
Vice President

Open slot
Secretary

Mr. Bill Morgan
Vice President

Mr. Perry Roberts
Vice President

Mr. Bob Mahar
Vice President

Mr. Ricky Young
Vice President

Mr. Steve Hesler
Vice President

Mrs. Lynda Morgan
Vice President

Mr. George Desario
Vice President

CV/FB Chapter Activities

- **Soldier Recognition Programs**
- **Family Support Programs**
- **Deployment / Re - Deployments**
- **Support Community Events**
- **Defense Industry Day / Industry Luncheons**
- **Ft Benning Night @ AUSA Annual Meeting**
- **Hooah Tent / Army Ten Miler Sponsorship**
- **Local Community Support**

Don’t forget to like us

Summary

- Thanks to our Soldiers, and civilian work force for their support / work on Industry Day.
- If you have a question, please ask!
- Next best thing to actually serving…is serving the Soldiers and Families of the Army! Thank you!
- Feedback is important… **7069925637**

COL Ken Harvey

Industry Day and Quad Chart ROE

MCoE Industry Day

Task: MCoE conducts Industry Day on 13 April 16 from 0830-1800 at Columbus Iron Works

Purpose: MCoE convey Desired Capabilities to the Defense Industry

End State: MCoE brief industries on Desired Capabilities resulting in Quads and White Papers from industry for Tier process by the MCoE to determine the CG, MCoE AUSA Engagement Plan

Help Us to Help You

- Use the Quad Chart Format
- Use Adobe PDF file for submission of QUAD
- Limit 1 recommended solution per PDF file, do not group multiple recommendations within the same PDF file
- Include recommendation title in the subject line of the e-mail
- Business Development Consultants: Specify which companies you represent on which programs

Quad Chart Format

Capability Name:

Picture or graphic

Description: provide a brief description of the Capability. Include Technology Readiness Level (TRL).

Operational Description: Identify how and where the proposed solution will be employed and who will employ it (i.e. echelon, individual operators, staffs, etc.) to address what capability. Include battlefield system interrelationships and dependencies.

Contact Information: Provide the full name and address of the organization submitting the proposed solution. Identify the Business Development POC and Subject Matter Expert POC as required. Provide the name, e-mail address, and phone number of each for follow up.

Quad Chart Timeline

CV/FB AUSA Industry Day	13 April 16
Quad Charts due to MCoE	NLT 13 May 16

Email: usarmy.benning.mcoe.mbx.industry-day@mail.mil

Quad Chart Tier Ranking complete	12 August 16
Industry notified of Quad Tier Ranking	26 August 16
AUSA Annual Meeting and Exposition	3-5 October 16

Quad Chart Tiers

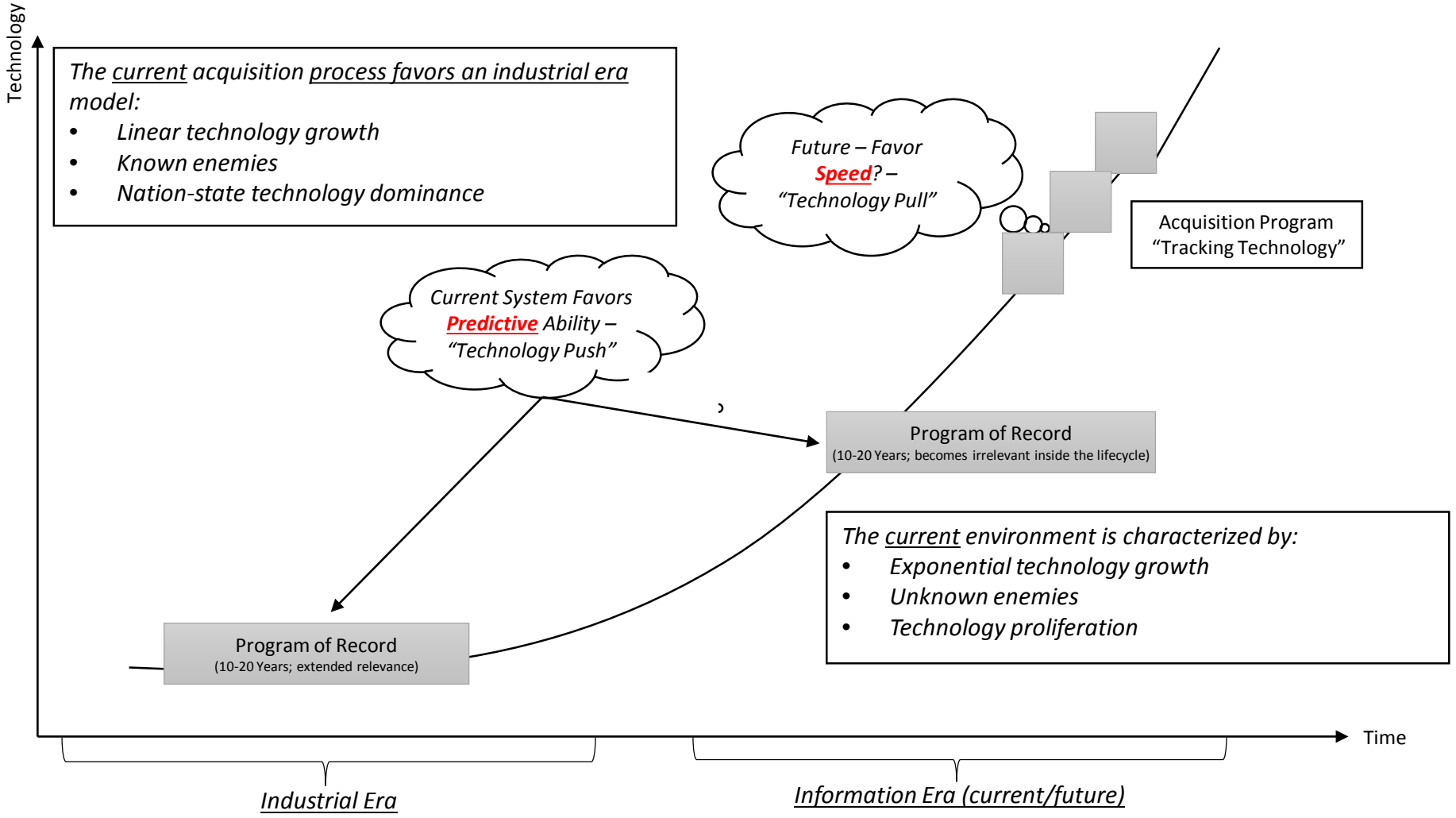
- Tier I: Outbrief to the MCoE CG at AUSA National Conference
- Tier II: Outbrief to the Division Director
- Tier III: Outbrief to the Requirement Branch Chief
- Tier IV: This is our requirement area, but does not meet our required capability set
- Tier V: This is not our requirement area; POC to alternate Center of Excellence provided
- Tier Definition: The briefing path selected to best facilitate communication with the MCOE

BG Eric J. Wesley

Commanding General

U.S. Army Maneuver Center of Excellence

Situation



"Big A" Acquisition should not be built around industrial era development but be focused on the information age exploitation of emerging technologies.

15 Minute Break

Donald M. Sando

Director, Capabilities Development and Integration Directorate

U.S. Army Maneuver Center of Excellence

BG Peter L. Jones

Infantry School Commandant

U.S. Army Maneuver Center of Excellence

Mounted Requirements Division

COL William Nuckols

Director

Organization Chart

COL William Nuckols	Director	545-5275
Ted Maciuba	Deputy Director	545-2078
	HEAVY SYSTEMS	*All prefixes are 706*
LTC Eric Lowery	Chief, Heavy Systems	545-4614
Marty Plummer	Deputy Chief, Heavy Systems Abrams / FFV	545-7844
Don Brophy	Stryker / MMS	626-8588
Mark Andrews	AMPV / Bradley	545-1715
Steve Peralta	Ammo / IFLIR	545-4810
	LIGHT SYSTEMS	*All prefixes are 706*
LTC Ted Johnson	Chief, Light Systems	626-2897
Tom Stafford	Deputy Chief, Light Systems MRAP / JTLV	545-4701
Al Howard	MPF / LRV /GMV	545-1915

Priorities of Effort

- Armored Multipurpose Vehicle (AMPV)
- Mobile Protected Firepower (MPF)
- Light Reconnaissance Vehicle (LRV)
- Vehicle Protective Suite (VPS)
- Ground Mobility Vehicle (GMV)
- Engineering Change Proposals
  - Abrams, Bradley, and Stryker
- Future Fighting Vehicle (FFV)
- Sensor Improvement Study
- Armored Crewmember Ensemble (ACE)

Soldier Division

TRADOC Capability Manager - Soldier

COL Travis Thompson

Director

Soldier Division / TCM Soldier

Fort Benning, Home of the MCoE

Director, Soldier Division/TCM-Soldier

Director: COL Travis Thompson
Phone: 706-545-1189

SD and TCM-Soldier represent every Soldier in the Army. We are the user representative to the TRADOC CDR. We develop and manage capabilities for everything a Soldier wears, carries or consumes.

TCM-Soldier SGM

SGM James Carroll
Phone: 706-545-4798

Soldier Requirements Division

Deputy Director: David Libersat
Phone: 706-545-9467

Lethality Branch

Chief: LTC Chris Kennedy
Phone: 706-545-1910

Deputy: Matt Walker
Phone:706-545-7226

Soldier Systems Branch

Chief: Vacant
Phone: 706-545-3901

Deputy: John Yancey
Phone:706-545-6406

Electronics & Special Developments / Remote Autonomous Systems / Operational Energy Branch

Chief: LTC John Thane
Phone: 706-545-4950

Deputy: Phil Cheatham
Phone:706-545-4952

TRADOC Capability Manager - Soldier

Deputy Director:
Pat Berger
706-545-1020

TCM-S Integration:
LTC Victor Deese
706-545-3914

Nett Warrior (NW)

Chief: MAJ Vincent Highley
706-545-4105

SEP

Tom House
706-545-1311

DIAT

Gene Fober
706-545-9991

SFDF*

Mr. Dave Dice
706-545-4736

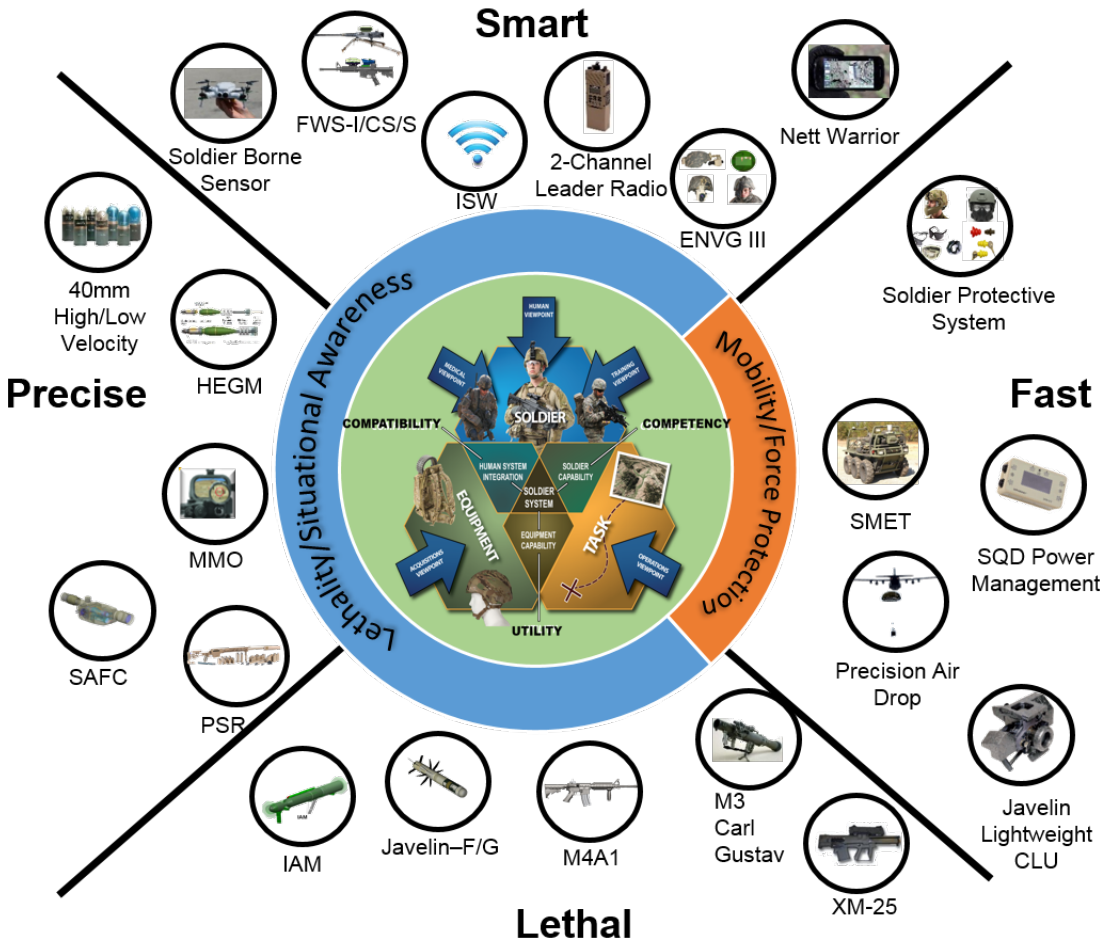
*Squad: Foundation of the Decisive Force (SFDF)

Maneuver Center of Excellence - Team of Soldiers, Families, and Civilians from the Best Army in the World!

Soldier Requirements and TCM – Soldier Division

Fort Benning, Home of the MCoE

Soldier Division develops future requirements and manages Soldier capabilities for all Soldiers across the DOTMLPF domains, in all formations, with a primary focus on Maneuver Brigade Combat Teams and Squads, in order to strengthen America's Force of Decisive Action and provide the Army with the best trained and capable Soldiers in the world.



Current Initiatives

- Connecting Soldiers to the network
- Mobile Handheld Computing Environment Information Systems (and Applications)
- Counter Defilade Capability
- Soldier Borne Sensor (Squad and PLT)
- Soldier Load – Cognitive and Physical (tools and materiel solutions)
- Fire Control and other lethality enablers (individual and formation)
- Soldier Protection System (Bulk, weight, stiffness)
- Weapon and Robotic Payloads
- Small Unit Power Generation

Directorate of Training and Doctrine

Dr. Jay A. Brimstin
Acting Director, DOTD
(706) 545-8437
jay.a.brimstin,.civ@mail.mil

Chris K. Jaques
Chief, Individual and Systems Training Division, DOTD
(706) 545-5209
christian.k.jaques.civ@mail.mil

Purpose

- Inform industry on MCoE/ DOTD Requirements
- Discuss future technologies and the evolution of the Synthetic Training Environment (STE)
- Solicit Industry support for DOTD efforts
- Solicit Industry “Quad Charts”/White Papers

Directorate of Training and Doctrine

Fort Benning, Home of the MCoE

MISSION STATEMENT

Develop doctrine and training products, programs and services to enhance the combat effectiveness of the current and future Maneuver Force

FUNCTIONS

- Doctrine & Collective Training Division:
  - FMs and ATPs
  - Collective Tasks and Combined-Arms Training Strategies (CATs)
  - Manages development and conversion of publications & GTAs to eBooks for mobile devices
  - All Army direct fire weapon system training strategies
- Leader Development Division:
  - Programs of Instruction and Lesson Plans
  - Army Learning Model implementation
  - Digital apps & Interactive Multi-media Instruction (IMI)
- Individual & Systems Training Division
  - Individual Tasks for 11 and 19 series MOS
  - System Training Plans (STRAP)
  - Integrated Training Environment
  - CIED MTTs and training
  - Program Evaluation Office

Directorate of Training and Doctrine

Dr. Jay Brimstin: Deputy Director

Christian Jaques: Chief, Individual and Systems Training Division (ISTD)

CPT James Rogers: Simulation and Technology Team Chief

Milton Fields: Individual and Systems Training Division Team

Jerry Niggemann: Chief, Systems Training Branch

Future Capabilities & Requirements

- **Mature Artificial Intelligence**
- **Augmented Reality**
- **Adaptive learning Capability**
- Human Dimension (Cognitive, Physical, and Social)
- Trainability
  - Learnability
  - Usability
  - Retainability
- Reduced NET footprint (Measure of Effectiveness for Trainability)
- Evolvement from Integrated Training Environment (ITE) to Synthetic Training Environment (STE)

Mission Command

LTC Neil C. Everingham

Chief of Integration, TCM Brigade Combat Team Mission Command

Mission Command Capabilities

- TCM BCT Mission Command, CDID, MCoE, works with Mission Command CoE, Cyber CoE and supporting materiel developers from ASA(ALT)
- Capability development and integration of mission command capabilities for the Brigade Combat Team (BCT)
  - Command Posts
  - Mounted Mission Command
  - Dismounted Mission Command
- Formation Centric
  - Armored BCT
  - Infantry BCT
  - Stryker BCT

TCM BCT-TM Priorities for 2016

1. Tactical Point of Need: "Our maneuver forces must be equipped with high bandwidth technologies such as 4G, LTE to connect to the network across the battlefield on lightweight, portable platforms."
2. Simplify CS Set fielding and improve training
3. Improve interoperability:
   a) CPOF and JBC-P/JCR
   b) Nett Warrior and JBC-P/JCR
   c) Air/Ground, CF/SOF, Coalition
4. Support acquisition and rapid fielding of 2-Channel leader's radio
5. Improve Command Post capabilities by formation.

MANEUVER BATTLE LAB

Industry Day
13 April 2016

Overall Classification of this brief is:
UNCLASSIFIED

Agenda

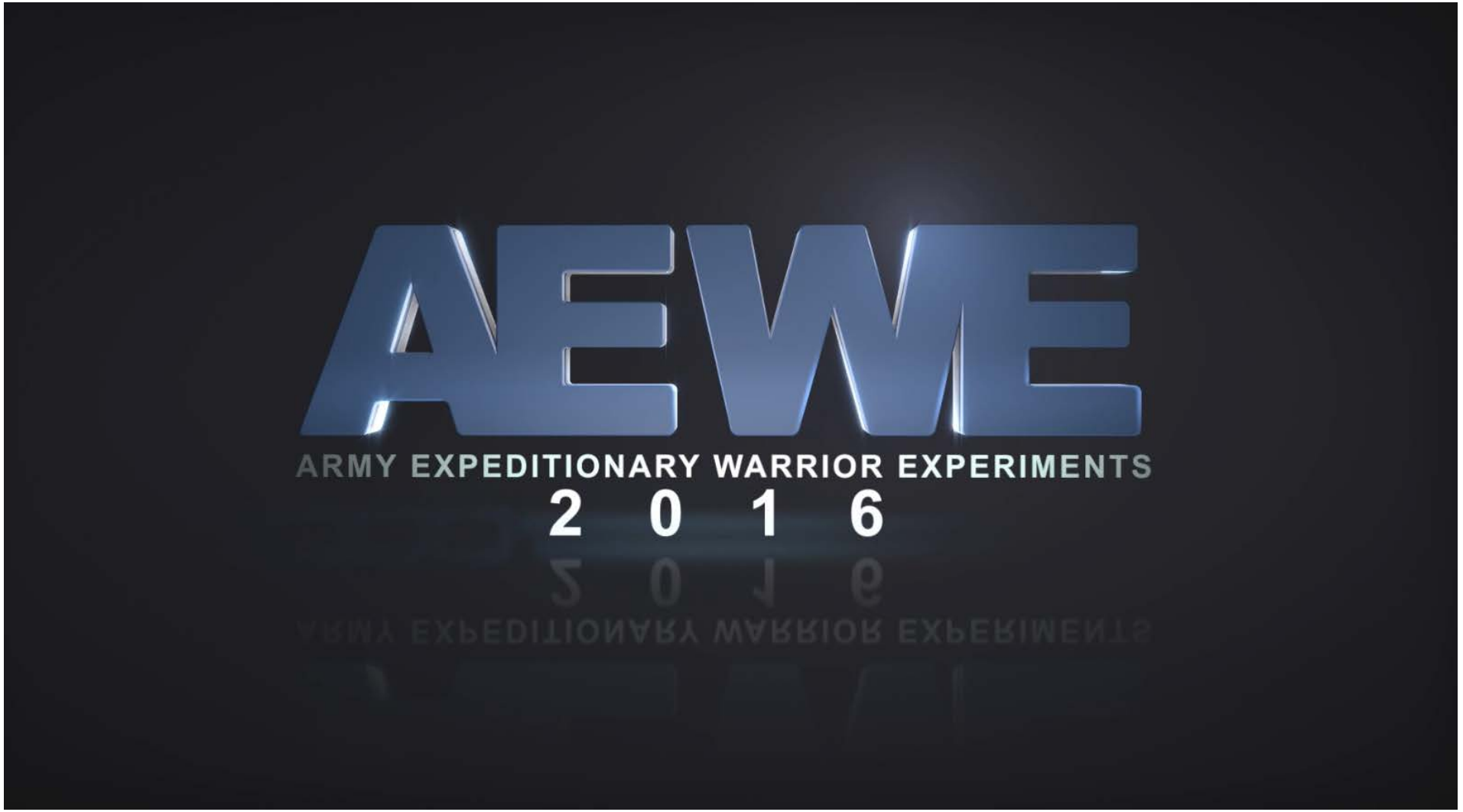
- ❑ Objectives
- ❑ Video
- ❑ FY16 Outcomes
- ❑ FY17 Capabilities

MBL Objectives

✓ ***Explore Solutions to Persistent Army Problem Sets***

- Shape the Force of 2025 (Leaner, Expeditionary, Lethal)
- Assess Mounted Platform Strategies for the Future Force
- Explore Possibilities of Tactical Internet and Communications at the Tactical Edge
- Exploit Technologies and 'Applications' for Increased Capability
- Leverage UAS for the 3rd Dimension Fight
- Sustain the Force in Ways that Reduce Load While increasing Mobility and Lethality

Centerpiece of the Army Prototype Experimentation Effort



AEWE 2016 Outcomes

- EXSUM Covers 17 Capabilities Impacting the Force
- 12 Requirements Documents Informed
  - ✓ 1 Capability Based Assessment
  - ✓ 6 Capability Development Documents
  - ✓ 5 Capability Production Documents
- 3 Capabilities Transitioned for Immediate Availability
  - ✓ NSN Recommendation (Multipurpose Tool)
  - ✓ Contract Additions (Communications Technology)
  - ✓ Basic Issue Item Inclusion (Vehicle Self Recovery)
- 3 Technologies Recommended for Army Warfighting Assessment
- Findings will inform Candidate Selections for three Programs of Record

AEWE 2017 Capabilities Selected

Maneuver Battle Lab

Combined Arms Maneuver

Lethality Enablers
- Small Arms & Crew Served Fire Control
- Target Hand Off
- 40mm High Velocity Counter Defilade, Enhanced Anti-Personnel
- 40mm Low Velocity Extended Range
- Shoulder Launched Munition Improvements
- Small Arms Suppressors

Maneuver Support Enablers
- Variable Range Non-Lethal Capabilities
- Breaching Solutions
- CBRNE Detection and Containment Capabilities

Sustainment

Water
- Expedient Purification and Testing Capabilities

Unmanned Load Bearing Capabilities
- UGV

Field Expedient Landing Pad Capabilities

Mission Command

Lower Tactical Network
- Man-Portable 4G Network
- Position Location Information Over SINCGARS
- Terrain Analysis-Network, Sensor Deadspace
- Radio-Over-Satellite

Situational Understanding/Situational Awareness
- Persistent Surveillance UAS
- Soldier Borne Sensors
- On Demand Micro UAS (3D Printing)
- Real Time Intelligence Capability Software
- Compact Short Wave Infra-Red Capability
- Small Unit Doppler Radar Capability

Training

Training Simulators
- Battlefield Effects Simulators (Pyrotechnics)
- Claymore MILES Surrogate

Virtual Training
- Driving
- Heavy Weapons
- Call For Fire Trainer

Training Munitions
- 40mm LV Extended Range Training Round
- .50 Cal Reduced Range Training Ammunition

AEWE 2017 Challenges

- Dual-channel radio capability to bridge the data/voice gap
  - Improve leader communication
- Cargo UAS
  - sustain small units in austere environments
- Tethered/vehicle-launched UAS
  - to provide over-the-horizon situation awareness
  - Network density and extension
- Mission command capabilities that are integration-ready
  - Apps that ride on current mission command systems (Nett Warrior)
  - Enablers that leverage existing capabilities
- Leader virtual trainers

Squad: Foundation of the Decisive Force (SFDF)

Combined Arms Futures Integration Exercise (CAFIX) - The Vision

CAFIX Vision

- A campaign of demonstrations, displays, and assessments to inform requirements, introduce capability, and offer leadership options to mitigate gaps

- Offers RDECs and Industry a venue that is relatively inexpensive, and does not take up a lot of time

- Identifies "targets of opportunity" that are ripe for more than an hour or so of discussion with capability developers (non-users)

- Vision:
  - **"Quick Assessment(s)"** Series of events, 1 to 2 days (3 days maximum) in duration, done in the "back yard" with Soldiers gathered from NCOES, OES students, and units
  - **"Focused Assessment(s)"** RDEC and Industry representative(s) bring their "capability" during coordinated/scheduled date(s) and **demonstrate** the capability, and **collect their own feedback** from the Soldiers to "mature" their "capability" for participation in a next event - a more operationally "Focused Assessment"

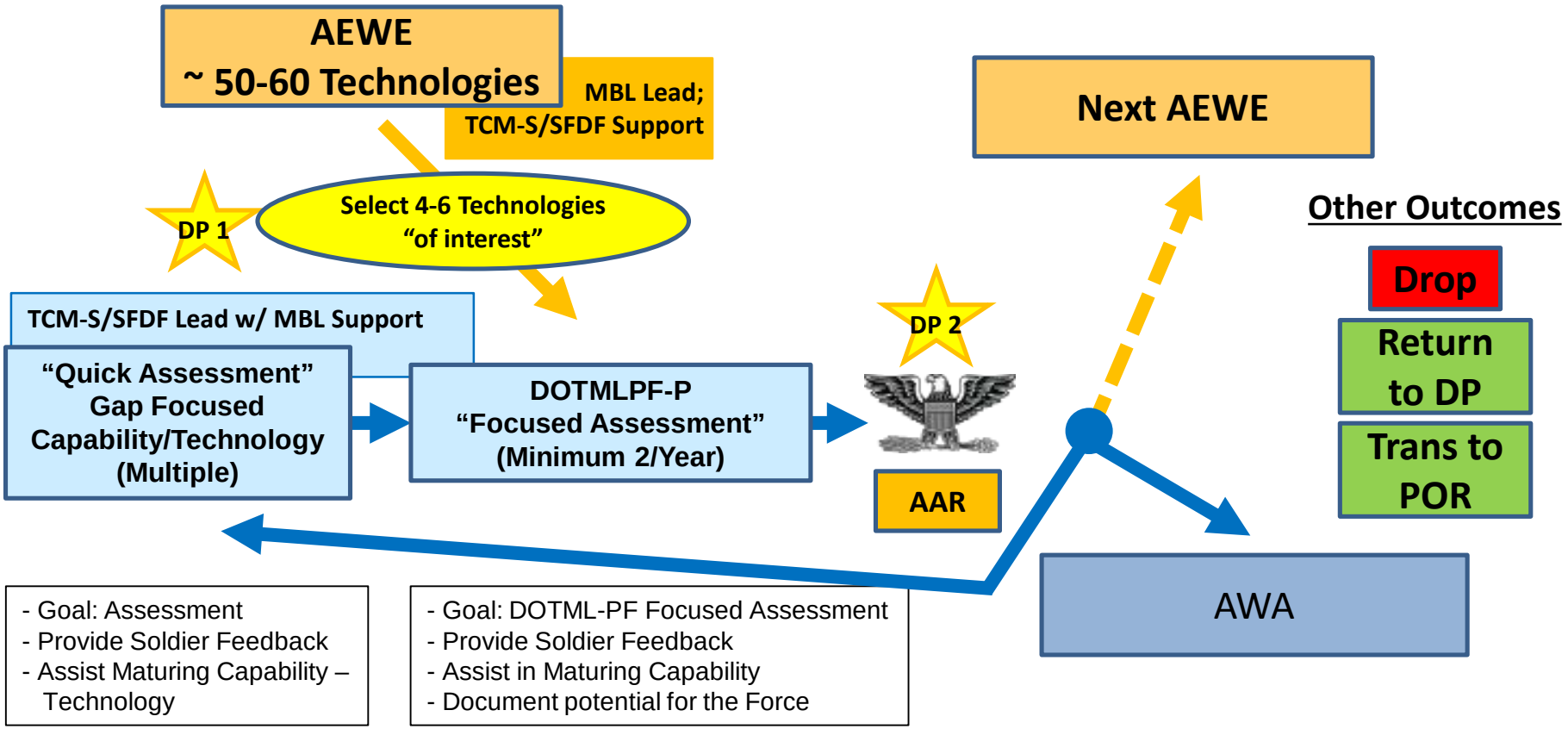
- AAR conducted at the 06 level to receive recommendations concerning capabilities that could go to the next AEWE, an AWA, or potentially to an NIE

- Other recommendations are possible as well (Drop, Return to another Decision Point for consideration, or transition to a POR)

Combined Arms Futures Integration Exercise (CAFIX)

VISION: CAFIX

…NOT JUST A SINGULAR CULMINATING EVENT…BUT A SERIES OF EVENTS FOCUSED ON MITIGATING KNOWN/EMERGING GAPS



CAFIX – Supports Both "Quick Assessment" and DOTML-PF "Focused Assessments" with specific focus for AWA and NIE venues; and is Complementary to AEWE

Key Dates in CAFIX Campaign

✓ 22-26 Feb	Fuel Cell Demonstration
• 3-5 May (T)*	Micro-Doppler Radar Demonstration
• 10-12 May	Futures Integration Symposium
• 16-20 May	Sensor enabled Scout Section FA
• TBD	Precision Grenade
• TBD	Wireless Dismount to Vehicle Communications
• 17 Jun	Candidate submission packets for AWA18 due to STRAC D
• 27 Jun	AWA18 Concepts and Capabilities Review Board begins

*pending completion of SOCOM fielding

Futures Integration Symposium

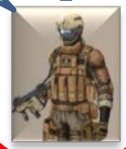
Purpose: Develop a common, DOTMLP-F Integrated, vision of the Soldier of 2025 and 2050 among the community of Capability and Materiel Developers, Training and Education, Human Dimension, and S&T Centers.

Goals:

- Examine the community's collaborative efforts toward improving the Soldier as part of the small unit.
- Examine the DOTMLPF implications of 2025 and 2050 on the future Soldier/Small unit.
- Develop a common understanding of the capabilities of the Soldier of 2025 and 2050.
- Develop a common understanding of the interdependencies that exist in the development of the Soldier of 2025 and 2050.

TCM-Soldier Futures Integration

2015 2020 2025 2030 2040 2050



SQD Baseline Study

DARPA's SQD-X Out-puts

MAY 2016 First Annual Futures Integration Summit

"Quick Assessment"
DOTML-PF Focused Assessment
AWA or AEWE

CAFIX role:

Iterative development
Integrated with the 2025M Campaign:

UQ/UC	– Corp/DIV	- ARCIC
AWA/NIE	– BDE/BCT	– BMC
AEWE	– SQD-BCT	– ACD
CAFIX	-- Ind. to CO	- ACD

ESDB	PEO Soldier
Lethality	PM SSI
RAS	PEO Soldier PMs
Op Energy	TCM I/S/A
Nett Warrior	TCM R&S
DOTD	TCM BCT MC
SaaS	S&T
MRD	DARPA
USMC	OCOI
	"the DECS"

Develop a common vision for Soldier & small unit capability development

Cross referenced with AWfCs, AOC, M&MC

TCM Soldier Integration Mission

13 April 16 / Columbus Trade Center

1200-1300	**Lunch**	
1300-1445	**Mr. Carlisle / Mr. Sando**	**Breakout Session 1**

Sycamore Room: Soldier – Soldier Systems, Robots/Energy, Lethality, and Sensors/Night Vision
Room 205: Mounted - Mobility, Protection and Lethality
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1445-1515	**Break**	
1515-1700	**Mr. Carlisle/Mr. Sando**	**Breakout Session 2**

(repeat schedule of Breakout Session 1)

1700-UTC	**AUSA Post Conference Reception**	**Mr. Tom Carlisle**